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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------------|------------------|
| 09/538,947  | 03/31/2000  | John S. Haikin       | 36J.P263                   | 9787             |
| 5514  | 7590        | 11/03/2004           | EXAMINER                   |                  |
| FITZPATRICK CELLA HARPER & SCINTO<br>30 ROCKEFELLER PLAZA<br>NEW YORK, NY 10112 |             |                      | NGUYEN, MADELEINE ANH VINH |                  |
|   |             |                      | ART UNIT                   | PAPER NUMBER     |
|   |             |                      | 2626                       |                  |

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 09/538,947             | HAIKIN, JOHN S.     |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Madeleine AV Nguyen    | 2626                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16, 18-36 and 38-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 11-16, 18, 31-36, 38, 46 is/are allowed.
- 6) Claim(s) 1-6, 9, 10, 17, 19-26, 29, 30, 37, 39-45, 47, 48, 53 and 54 is/are rejected.
- 7) Claim(s) 7, 8, 27, 28 and 49-52 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)              |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ . | 6) <input type="checkbox"/> Other: ____ .  |

**DETAILED ACTION**

This communication is responsive to amendment filed on June 18 2004.

Applicants amend the specification, claims 11, 18, 31, 38, 46, and cancels claims 17, 37.

***Response to Applicant Remarks***

Applicant remarks that Falk is not seen to store spatial information in a measurement store. In addition, nothing in Falk is seen to disclose a measurement store having an entry storing a color value of the color patch, the entry being updated to include spatial information of the color parch and measurement information of the color patch.

Falk teaches a measurement store 500 (Fig.5) having an entry corresponding to a color patch 501 wherein the entry comprising a color value of the color patch (col. 5, lines 6-14). When the scanner 102 scan the measurement store 500 to have a scanned calibration image 215, it updates in the measurement store to include spatial information of the color patch, for instance 502 to enable the calibration software to locate the each of the color patches, orientation arrow 503, test strip placement information 504 (col. 5, lines 21-30). Falk, then teaches the step of obtaining a measurement of the color patch in the target image (gray scale target test strip) and updating the entry in the measurement store to include the measurement (216). Although Falk does not directly mention that the measurement store 500 is updated by the scanned calibration image 215 and scanned test strip data 216, and 502, 503, 504 are spatial information, it would have been obvious to one skilled in the art at the time the invention was made to consider the reading of Falk to the claimed invention since it does not define and limit the steps of updating

and what kind of spatial information. Rose is combined with Falk to support that the spatial information is stored in the measurement store since the scanned calibration image 215 and the scanned test strip data 216 are stored in the same data structure 218 (col. 6, lines 11-15).

Thus, applicant's remarks of the rejection of the claims in the last office action is not persuasive and, therefore, the rejection of claims 1-4, 10, 21-24, 30, 41-44 is maintained.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 10, 21-24, 30 and 41-44 rejected under 35 U.S.C. 103(a) as being unpatentable over Falk (US Patent No. 5,760,913) in view of Rose (US Patent No. 5,200,816).

Regarding claims 1 and 4, Falk discloses a method for integrating characterization information associated with a target image for use with a color reproduction device comprising the steps of obtaining a measurement store (500, Fig.5) having an entry corresponding to a color patch of a target image, the entry comprising a color value of the color patch; updating the entry in the measurement store to include spatial information of the color patch in the target image; obtaining a measurement of the color patch in the target image (Fig.6) and storing the entry in the measurement store to include the measurement.

Falk fails to teach that the spatial information of a color patch is sent to the measurement store. The analogous ad of Rose adds that the location of each color

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value for a plurality of pixels, which can be considered patches (col. 26, lines 25-34) which completes the required steps of claim 1 as well as claim 4. Given the Falk and Rose art in their structure, function and application to color device calibration, it would have been obvious to those of ordinary skill in the art at or before the time of the invention by the applicant to use the methods to obtain a measurement store for color patches from a color target, holding color values and spatial information, and measuring and updating the store with the patch color values, based upon the combined teachings of Falk and Rose.

Regarding claims 2 and 3, Falk in view of Rose disclose the process discussed above in claim 1, and Falk further adds that the method of storage is a data file (Abstract, line 6 and Fig. 2). The use of an ASCII data file or IT-8-formatted data file as a means of accomplishing the method or apparatus is obvious. If a small number of potential embodiments come to the mind of one skilled in the ad such that it would have been obvious to apply them as a means, then the reference anticipates the claim, and thus is rejected under the same justification as claim 1.

Regarding claims 21-24 and 41-44, the means of accomplishing the method or apparatus is implied within it, given that the use of a computer-readable medium (claims 21-24) or a memory (claims 41-44) would be obvious to those of ordinary skill in this art and thus are rejected under the same justification as claims 1-4.

Regarding claim 10, Falk in view of Rose disclose the process discussed above in claim 1, and Rose further adds the use of a monitor (col. 3, lines 61-62).

Regarding claim 30, the means of accomplishing the method or apparatus is implied within it, given that the use of a computer-readable medium would be obvious to

those of ordinary skill in this art and thus is rejected under the same justification as claim 10.

3. Claims 5, 25, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falk in view of Rose as applied to claims 1, 21 above, and further in view of Swan (US Patent No. 6,181,354).

Regarding claims 5, 25, and 45, Falk in view of Rose disclose the process discussed above in claim 1, but fail to teach that the spatial information includes size information. The analogous art of Swan adds that the physical properties of patches including size and appearance are included in the memory store (col. 4, lines 64-66). Given the Falk and Rose art in their structure, function and application to color device calibration, and the relation of this to Swan in its use of color patches, that could be applied to the Rose patent for use with monitors, it would have been obvious to those of ordinary skill in the art at or before the time of the invention by the applicant to use the methods to include size information in the memory store, based upon the combined teachings of Falk, Rose and Swan.

Regarding claims 25 and 45, the means of accomplishing the method or apparatus is implied within it, given that the use of a computer-readable medium (claim 25) or a memory (claim 45) would be obvious to those of ordinary skill in this art and thus are rejected under the same justification as claim 5.

4. Claims 6, 9, 26, 29, 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falk in view of Rose, and further view of Yamaguchi

(US Patent No. 5,227,872).

Regarding claims 6 and 9, Falk and Rose disclose the process discussed above in claim 1 , but fail to teach that a copy of the target is made and that the control signal for the color patch is detected. Yamaguchi adds that the control signals are used to produce color values (col. 6, lines 56-63) and are stored as control signals (col. 7, lines 60-62). Given the Falk and Rose art in their structure, function and application to color device calibration, and the relation of this to Yamaguchi in its use of color correction, and due to the identical characteristics of color calibration and correction, it would have been obvious to those of ordinary skill in the art at or before the time of the invention by the applicant to use the method of having a copy of the target made and that a control signal for the color patch is detected and stored, based upon the combined teachings of Falk, Rose and Yamaguchi.

Regarding claims 26, 29, 53 and 54, the means of accomplishing the method or apparatus is implied within it, given that the use of a computer-readable medium (claims 26 and 29) or a memory (claims 53 and 54) would be obvious to those of ordinary skill in this ad and thus are rejected under the same justification as claims 6 and 9.

5. Claims 19, 20, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falk in view of Rose, and further in view of Edge (US Patent No. 5,781,206).

Regarding claims 19 and 20, Falk and Rose disclose the process discussed above in claim 1 , but fail to teach the ability to generate the target image using the color value to provide input to the output color device (claim 19), and that the color reproduction device is

characterized using the measurement store (claim 20). The analogous art of Edge adds that a new set of color patches can be generated using input color values (col. 17, lines 9-11) and that this is done on an imaging system (col. 16, lines 36-39). It is also implied that any such method could be applied to the purposes of characterizing the color reproduction device (col. 18, lines 36-39). Given the Falk, Rose, and Edge art in their structure, function and application to color device calibration, it would have been obvious to those of ordinary skill in the art at or before the time of the invention by the applicant to use the method of generating a color patch using the color value from the measurement store, and that this can be done for an output color device, and that the color reproduction device is characterized using the measurement store, based upon the combined teachings of Falk, Rose and Edge.

Regarding claims 39 and 40, the means of accomplishing the method or apparatus is implied within it, given that the use of a computer-readable medium would be obvious to those of ordinary skill in this art and thus are rejected under the same justification as claims 19, and 20.

6. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falk in view of Rose, and further in view of Tanaka (US Patent No. 5,621,873).

Regarding claim 48, Falk in view of Rose disclose the process discussed above in the rejection of claim 41, but fail to teach the ability format a memory. Tanaka adds that a memory includes format information (claim 6: col. 16, lines 12-13). Given the Falk and Rose art in their structure, function and application to color device calibration, and the relation of this to Tanaka in its use of color processing, and due to the similar characteristics of color calibration and

processing, it would have been applicant to use the method of formatting the memory store, based upon the combined teachings of Falk, Rose and Tanaka.

***Allowable Subject Matter***

7. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

- a. Claims 11-16, 18, 31-36, 38 and 46 are allowed.

The following is an Examiner's Statement of Reasons for Allowance:

Claims 11-16, 18, 31-36, 38 are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches a method of integrating characterization information associated with a target image for use with a color reproduction device as claimed in claims 1, 21, 37 and further including the step of identifying a measurement status using the measurement store, and wherein the measurement store is updated to include target dimension information.

Claim 46 is allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches a memory for integrating characterization information associated with a target image for use with a color reproduction device comprising a measurement component representing a measurement of the color patch wherein a placeholder is usable in the spatial and measurement components to identify missing data.

b. Claims 7, 8, 27, 28, 49-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an Examiner's Statement of Reasons for Allowance:

Claims 7, 8, 27, 28, 49-53 are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches a method of integrating characterization information associated with a target image for use with a color reproduction device as claimed in claims 1, 6, 21, 26, 41, 48 and further including the steps of replacing the color value in the measurement store with the control signal, adding an input signal component to the entry which comprises a control signal, and wherein the format information comprises at least one position tag identifying a data type of an element in the spatial component, the format information includes dimension information of the target image, the format information includes a uniform sizing of color patches in the target image, the format information includes a unit of measure of elements in the spatial component.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Yoda et al (US Patent No. 5,502,580) discloses a color reproduction system wherein basic profiles or sub-profiles can be added or modified to obtain color images of high reproducibility.

b. Tompkins et al (US Patent No. 5,655,062) teaches a method and apparatus for printing a color document file including a print driver responsive the color document file and particular color assignment adds color mapping parameters to the color document file to produce a modified color document file.

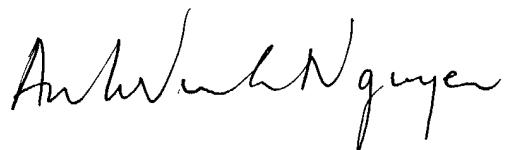
9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 703 305-4860. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on 703 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Madeleine AV Nguyen  
Primary Examiner  
Art Unit 2626

October 21, 2004